

REMARKS

Favorable consideration and allowance are respectfully requested for claims 1-10, 14-16 and 18-20 in view of the foregoing amendments and the following remarks. Claims 11-13 and 17 were previously cancelled.

Claim 1 is amended to clarify that during the step of transporting, the grapes are inside a connection line and claims 6 and 7 clarify that the grapes are carried inside the connection line. Claims 1, 6 and 7 are also amended to clarify that the carbon dioxide is fed via a valve which allows carbon dioxide to enter the connection line. New claims 19 and 20 depend from claims 6 and 7, respectively and clarify that there is at least one temperature measuring device that monitors the temperature of the grapes in the connection line.

The rejection of claims 1-2, 5-10, 14-16 and 18 under 35 U.S.C. 102(b) as anticipated by Renzo et al. (EP 0542055 A-1) and of claims 1-10, 14-16 and 18 as obvious over the same reference, is respectfully traversed.

Independent claims 1, 6, and 7 recite that the grapes are transported inside a collection line and that the carbon dioxide is provide to these collection lines via one or more valves.

In contrast, Renzo describes a system where grapes are placed into chambers (4A and 4B) and carbon dioxide is released into the chambers and diffused into the chambers with fans 30, see col. 3, lines 29-36. Further, a suction fan 35, is provided to remove the cryogenic gas from the chambers, as it is dangerous for machine operators (workers), see col. 3., lines 41-47. Thus, the

skilled artisan learns that Renzo is directed to an open system, where the grapes are put in a room large enough to house and provide space for workers to work. Further, Renzo relies on fans to disperse carbon dioxide throughout these rooms and to withdraw cryogenic gases.

In contrast, the pending claims clarify that the grapes are inside one or more connection lines and that valves connected to these lines are used to allow the flow of coolant into the lines. These connection lines are significantly different from the open spaces provided by Renzo. The connection lines are much smaller and are sealed. The connection lines house grapes and coolant, not people and machinery (fans) as is the case with the chambers of Renzo. Not only would the fans such as those described by Renzo not work in the connection lines, these fans are unnecessary for the presently contemplated system. Similarly, valves are used to direct the flow of the grapes through the connection lines. As such, in contrast to the "open" system described by Renzo, the skilled artisan would understand the presently contemplated system to have a "closed" configuration. The present invention is directed to what is essentially a closed system, where the grapes are provided in closed connection lines and valves are provided to allow coolant to flow directly into the lines.

Further, independent claims 1, 6 and 7 recite that the carbon dioxide flow is shut off if the temperature falls below 7°C. Thus, in accordance with the invention, temperatures below 7°C are avoided.

In contrast, Renzo discloses a temperature range of from 0°C to 15°C - see column 1, lines 53-58. As explained previously, at the low end of this

temperature range the grapes would at least partially freeze. Freezing of the grapes has a negative effect on the taste of the wine produced by the process. Absent some teaching in Renzo that there would be a disadvantage to allowing the grapes to freeze, or, alternatively, from not sufficiently cooling the grapes, the skilled artisan would have no way to know of the importance of maintaining a low temperature but one not lower than 7°C. As explained previously, the present inventors determined that even 5°C is too cold for the grapes and that such a low temperature negatively effects the resulting wine.

Further, Renzo does not test the actual temperature of the grapes. Instead, Renzo tests the ambient air temperature in the room in which the grapes are being cooled, see sensor 33 in Figure 1. This is yet another difference between Renzo and the presently claimed invention.

Wine is a product enjoyed primarily for its taste. The value of different wines varies widely depending primarily on taste. The present application is directed to, among other things, the novel discovery that certain cooling temperatures for the grapes are associated with significantly improved taste in the resulting wine – see, e.g., paragraphs [0005] and [0006] of the present application.

There is no disclosure anywhere in Renzo to stop the cooling process if the temperature of the grapes drops below 7°C. Not only does Renzo not teach testing the temperature of the grapes, Renzo, does not differentiate between a warm 15°C or an icy 0°C. Only the present inventors realized that by selecting the lower temperature limit of 7°C the product produced by the process can be

significantly improved. This is an unexpected and unforeseen result, that is precisely the type of result useful to overcome an assertion of obviousness based on Renzo. Indeed, Renzo teaches a preferred temperature that is outside of the claimed methodology. Thus, if one were to operate according to Renzo's preferred temperature, one would *never* practice the claimed method or necessarily have the claimed apparatus.

The skilled artisan would have no reason to modify the teachings of the Renzo reference, to interrupt the charging with carbon dioxide if the temperature of the grapes falls below 7°C, as is required of the present claims. Instead, based on the teachings of Renzo, the skilled artisan would have monitored the ambient air temperature and allowed the temperature to fluctuate from 15°C to 0°C. The recent Office Action again argues that "Renzo et al., is capable of interrupting the flow of carbon dioxide if the temperature drops below 7 degrees C." Anticipation is not merely a question of the capabilities of an apparatus taught by a reference, rather, the reference, must actually teach or suggest all of the steps of the claimed method. It is not enough for an apparatus to be capable of practicing a claimed method. Moreover, the presently claimed method is significantly different from the cited reference.

Claim 1 also recites a step of macerating that lasts only a few hours. In addition to the foregoing distinctions, Renzo does not teach a shortened maceration time as is presently claimed. The Office Action suggests that Grassin et al. (US 6,465,026) teaches a maceration time of one hour, however

this is for apple juices generally and not for a highly sensitive production process such for making wine.

Grassin teaches maceration of apple pulp to reduce the amount of pectin in the resulting juice. In contrast, grapes are macerated in the production of wine to extract flavor from the grape skin for the resulting wine. Thus, Grassin is aimed at removing part of the naturally occurring apple, whereas in wine production, macerating is performed so as to add to the flavor. Unlike apples, grapes do not have any pectin. Accordingly, based on Grassin, the skilled artisan would not consider a macerating step to be useful in the production of wine. Indeed, based on Grassin, the winemaker would have no reason to modify Renzo so as to include a macerating step.

Given these differences, the skilled artisan would not find the presently claimed invention anticipated by Renzo or obvious over the proposed combination of Renzo and Grassin. Indeed, it is highly unlikely that the skilled artisan would ever try to combine these references.

As described in the specification, for instance on page 1 at lines 23-26, the temperature and residence time affect the flavor of wine. Accordingly, the claims are directed to a process and apparatus which differs from that described by the cited prior art in a significant and result-directed way. The cited reference does not teach or suggest each and every limitation of the presently-pending claims and reconsideration and withdrawal of these rejections are therefore respectfully requested.

CONCLUSION

In view of the foregoing, the application is respectfully submitted to be in condition for allowance, and prompt favorable action thereon is earnestly solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket No. 038724.56071US).

Respectfully submitted,

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